CLAIMS

We claim:

 A method for deriving an optimized rule set for a fuzzy logic system, said method comprising the steps of:

generating a pool of random rules having a fitness function and storing said random rules;

evolving said random rules using a genetic algorithm to improve the fitness function of said rules in said random rule set until the overall fitness function of said rules plateaus, thereby generating an optimized rule; and

storing said optimized rule in an optimized rule storage area, said rules stored in said optimized rule storage area comprising said optimized rule set.

A method as set forth in claim 1, wherein said generating step includes the steps of:

checking said optimized rule storage area to determine if it contains any optimized rules; and

using any optical rules contained in said optimized rule storage area when generating said pool of random rules.

- A method is set forth in claim 1, wherein said evolving step comprises evolving the features of said random rules.
- A method is set forth in claim 1, wherein said evolving step comprises evolving the qualifiers of said random rules.

- 5. A method is set forth in claim 1, wherein said evolving step comprises evolving the operators of said random rules.
- 6. A method is set forth in claim 1, wherein said evolving step comprises evolving the features, cases, qualifiers, and operators of said random rules.
- 7. A method as set forth in claim 1, wherein said generating, evolving, and storing steps are repeated until a predetermined number of rules are stored as said optimized rule set.
- 8. A method as set forth in claim 7, wherein said repeating of said steps occurs on a real-time basis.
- 9. At method for deriving an optimized rule set for a fuzzy logic system for use in stock market analysis, said method comprising the steps of:

generating a pool of random rules having a fitness function and storing said random rule;

evolving said random rules using a genetic algorithm to improve the fitness function of said rules in said random rule set until the overall fitness function of said rules plateaus, thereby generating an optimized rule;

storing said optimized rule in an optimized rule storage area, said rules stored in said optimized rule storage area comprising said optimized rule set;

and

applying a stock market data set to said optimized rule set;

outputting a stock market analysis result based on the application of said stock market data set to said optimized rule set.

- 10. A method is set forth in claim 9, wherein said evolving step comprises evolving the features of said random rules.
- 11. A method is set forth in claim 9, wherein said evolving step comprises evolving the qualifiers of said random rules.
- 12. A method is set forth in claim 9, wherein said evolving step comprises evolving the operators of said random rules.
- 13. A method is set forth in claim 9, wherein said evolving step comprises evolving the features, cases, qualifiers, and operators of said random rules.
- 14. A method as set forth in claim 9, wherein said generating, evolving, and storing steps are repeated until a predetermined number of rules are stored as said optimized rule set.
- 15. A method as set forth in claim 14, wherein said repeating of said steps occurs on a real-time basis.

- 16. A method as set forth in claim 9, wherein said stock market data set comprises data regarding a particular stock choice.
- 17. A method as set forth in claim 9, wherein said stock market data set comprises data regarding a particular stock market.
- 18. A method as set forth in claim 9, wherein said stock market data set comprises data regarding comprising a particular segment of stocks.
- 19. A method as set forth in claim 9, wherein said stock market data set comprises data regarding comprising mutual funds.
- 20. A method as set forth in claim 9, wherein said stock market data set comprises data regarding comprising futures.